AMENDMENT TO THE CLAIMS

Listing of the Claims:

1. (Original) A method for separating a first quantity of milk drawn from a milking animal in an automatic milking machine from a second quantity of milk drawn from a milking animal in said milking machine comprising the steps of:

- milking an animal using said automatic milking machine,

- measuring a first indicator of mastitis,

- automatically collecting a small representative amount of said first quantity of milk during said milking,

- analyzing at least a part of said small representative amount of milk using an on-line cell counter for counting the number of cells in said first quantity of milk,

- operating a valve depending on the counted number of cells so that if the counted number of cells are below a first threshold said first quantity of milk is collected in a first container and if said counted number of cells are equal to or above said first threshold said first quantity of milk are directed to a drain or a second container, and wherein

- said analyzing of at least a part of said representative amount of milk, and said operation of said valve, are performed only if said first indicator of mastitis is above a second threshold.

2. (Original) The method according to claim 1, wherein the step of operating a valve further comprises the step of

- collecting said first quantity of milk in a third container if the counted number of cells are above a third threshold but below said first threshold and

- collect said first quantity of milk in said first container if said counted number of cells are below said third threshold, thereby collecting milk of a first superior quality in said first

container, milk of a second quality in said third container and milk of a third quality is directed to said drain or collected in said second container.

3. (Previously Presented) The method according to claim 1, wherein said first indicator of mastitis is one indicator, or a selection of multiple indicators, selected from a group of indicators comprising: the conductivity of said first quantity of milk, the NAgase value of said first quantity of milk, the Urea value of said first quantity of milk, the temperature of said first quantity of milk, the milk flow from said milking animal or the milk quantity from a teat of said milking animal.

4. (Previously Presented) The method according to claim 1, wherein said small representative amount of milk is collected from a milk measuring device.

5. (Previously Presented) The method according to claim 1, wherein said first quantity of milk drawn from one milking animal is collected in an end unit for the duration of performing the somatic cell count.

6. (Previously Presented) The method according to claim 1, wherein said first quantity of milk is collected from a first teat of a milking animal and said second quantity of milk is collected from a second teat of said milking animal.

7. (Previously Presented) The method according to claim 1, wherein said first quantity of milk is collected from a first milking animal and said second quantity of milk is collected from a second milking animal.

8. (Previously Presented) An automatic milking machine comprising means for separating a first quantity of milk drawn from a milking animal in said automatic milking machine from a second quantity of milk drawn from a milking animal in said milking machine wherein,

- a collecting device for collecting a small representative amount of said first quantity of milk during said milking,

- a measurement device for measuring a first indicator or mastitis,

- an on-line cell counter for analysing at least a part of said small representative amount of milk for counting the number of cells in said first quantity of milk,

- at least a first valve operable to direct said first quantity of milk depending on the counted number of cells, so that if the counted number of cells are below a first threshold said first quantity of milk is collected in a first container and if said counted number of cells are equal to or above said threshold said first quantity of milk are directed to a drain or a second container, and

- wherein said on-line cell counter is arranged to analyse said first quantity of milk only if said first indicator of mastitis is above a second threshold.

9. (Original) The automatic milking machine according to claim 8, wherein said valve is further operable to direct said first quantity of milk so as to:

- collect said first quantity of milk in a third container if the counted number of cells are above a third threshold but below said first threshold and.

- collect said first quantity of milk in said first container if said counted number of cells are below said third threshold, thereby collecting milk of a first superior quality in said first container, milk of a second quality in said third container and milk of a third quality is directed to said drain or collected in said second container.

10. (Previously Presented) The automatic milking machine according to claim 8, wherein said measurement device for measuring a first indicator of mastitis is arranged to measure one indicator, or a selection of multiple indicators, selected from a group of indicators comprising: the conductivity of said first quantity of milk, the NAqase value of said first quantity of milk, the Urea value of said first quantity of milk, the temperature of said first quantity of milk, the milk flow from said milking animal or the milk quantity from a teat of said milking animal.

11. (Previously Presented) The automatic milking machine according to claim 8, wherein said small representative amount of milk is collected from a milk measuring device.

12. (Previously Presented) The automatic milking machine according to claim 8, wherein said first quantity of milk is collected from a first teat of a milking animal and said second quantity of milk is collected from a second teat of said milking animal.

13. (Previously Presented) The automatic milking machine according to claim 8, wherein said first quantity of milk is collected from a first milking animal and said second quantity of milk is collected from a second milking animal.